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EXAMINER

MEUCCI, MICHAEL D

| ART UNIT | PAPER NUMBER |
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2142

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,354

Applicant(s)

ZIMMERMAN ET AL.

Examiner

Michael D Meucci

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 12 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Specification

1. The abstract of the disclosure is objected to because it uses claim terminology ("the method comprising the steps of," on line 5 of abstract). Correction is required.
See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. Claim 1 objected to under 37 C.F.R. 1.75 because of the following informalities:
Improper format of the claim is used. Applicant must state: "A method for generating..." at the beginning of the claim. See §1.436 of MPEP. Appropriate correction is required.
3. Claim 5 objected to under 37 C.F.R. 1.75 because of the following informalities:
Typographical error in line 2 of claim 5. The word "and" following "generated" should be replaced with "at."
4. Claim 7 objected to under 37 C.F.R. 1.75 because of the following informalities:
Typographical error in line 4 of claim 7. The word "constrains" following "protection" should be replaced with "constraints."

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

a. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Improper format of the claim is used. Applicant must state: "A method for generating..." at the beginning of the claim. See §1.436 of MPEP for claim formatting requirements.

b. Claim 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the processor. It is unclear from the language, what structure is intended to be covered by "processor." Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong et al. (U.S. 5,953,347).

a. As per claim 1, Wong et al. teaches generating a model of the multi-protocol layered network (lines 45-50 of column 1); determines protocol layers (lines 32-33 of

column 1); and maps an overlay including network elements, physical links, logical links, and association links (FIG. 1-16).

b. As per claim 2, Wong et al. teaches displaying protocols on a GUI (lines 9-17 and 43-50 of column 1); and displaying a protocol layer of the model with different technologies employed in a in visually distinct manners (FIG. 1-16).

c. As per claims 4 and 10, Wong et al. teaches displaying a 3D representation of overlays of two or more protocol layers of the model on a Graphical User Interface (GUI) (FIG. 1-16)

d. As per claim 5, Wong et al. teaches distinguishing between alarms generated at client layer and alarms generated at underlying layers (lines 51-59 of column 1). In the event of a service failure, Wong implements a recovery action that is initiated in a hierarchical manner and by nature will be able to distinguish where the service failure occurred.

e. As per claim 8, Wong et al. teaches a processor because it is inherent that the Newbridge Networks Corp. Intelligent NetworkStation contains a processor (lines 9-17 of column 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. 5,953,347) as per claims 1 and 2 respectively above, in further view of Mitchell et al. (U.S. 6,628,304).

Wong et al. fail to teach displaying a top view of the overlays of two or more protocol layers on a GUI. However, Mitchell et al. discloses displaying a top level view of the network (lines 32-36 of column 20).

One of ordinary skill in the art at the time of the applicant's invention would have recognized that it is quite advantageous for the network management system of Wong to provide means for displaying a top level view of the network. The top level view of FIG. 3 quickly conveys to the user the hierarchical relationships which exists between different elements (lines 11-13 of column 8 in Mitchell et al.). It is for this reason that one of ordinary skill in the art would have been motivated to include a top level view of the network in Wong's network management system as taught by Mitchell et al.

b. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. 5,953,347) as per claim 1 above, in further view of Dobbins et al. (U.S. 5,790,546).

Wong et al. fail to teach allowing a selection path in the transmission network by using selection criterion. However, Dobbins et al. discloses determining the best path utilizing a number of constraints (lines 33-34 of column 36).

One of ordinary skill in the art at the time of the applicant's invention would have clearly recognized that it is quite advantageous for the network management system of Wong to find an optimal path through a mesh which satisfies a number of independent

constraints (lines 44-45 of column 19 in Dobbins et al.). It is for this reason that one of ordinary skill in the art would have been motivated to allow a selection path in the transmission network by using selection criterion.

c. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. 5,953,347) as per claim 6 above, in further view of Dobbins et al. (U.S. 5,790,546).

Wong et al. fail to teach selection criterion from the group comprising: distance of transmission, delay allowed in receiving the transmission, degradation of the transmitted signals, protection constraints, or any combination thereof. However, Dobbins et al. discloses the constraints respectively:

- determination of the location of end systems (line 52 of column 36)
- accounting of each end system's usage of the network based on the number of data packet or byte transmissions (lines 53-54 of column 36)
- quality of service (line 38 of column 36)
- designation of authorized valid connections between first and second end systems (lines 50-51 of column 36).
- including one or more of: (the aforementioned constraints) (lines 32-34 of column 36)

One of ordinary skill in the art at the time of the applicant's invention would have clearly recognized that it is quite advantageous for the network management system of Wong to find an optimal path through a mesh which satisfies a number of independent constraints (lines 44-45 of column 19 in Dobbins et al.). It is for this reason that one of

ordinary skill in the art would have been motivated to allow a selection path in the transmission network by using selection criterion.

d. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. 5,953,347) as per claim 3 above, in further view of Mitchell et al. (U.S. 6,628,304). In addition to the combination of Wong et al. and Mitchell et al. for claims 3 and 9, Wong et al. teaches displaying a 3D representation of overlays of two or more protocol layers of the model on a Graphical User Interface (GUI) (FIG. 1-16).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang et al. (6,714,217 B2) discloses a system and method for providing a graphical user interface to, for building, and/or for monitoring a telecommunication network.

Dev et al. (6,923,750) discloses a method and apparatus for monitoring the status of non-pollable devices in a computer network.

Notani et al. (5,931,900) discloses a system and process for inter-domain interaction across and inter-domain connectivity plane.

Battat et al. (5,958,012) discloses a network management system using virtual reality techniques to display and simulate navigation to network computers.

Battat et al. (6,289,380) discloses a network management system using virtual reality techniques to display and simulate navigation to network computers.

Kagei et al. (5,204,955) discloses a network management method and system.

Ditmer et al. (6,490,620) discloses an integrated proxy interface for web based broadband telecommunications management.

Engel et al. (6,115,393) discloses a network monitoring system.

Lim (6,650,342 B1) discloses a method for operating network management system in a graphic user interface environment and network management system.

O'Brien et al. (6,470,384 B1) discloses a modular framework for configuring action sets for use in dynamically processing network events in a distributed computer environment.

Rozmanith et al. (5,185,857) discloses a method and apparatus for multi-optional processing, storing, transmitting and retrieving graphical and tabular data in a mobile transportation distributable and/or networkable communications and/or data processing system.

Hong et al. (6,628,305 B1) discloses an architecture and definition of an extensible, object-oriented graphical user interface framework for managing and administering heterogeneous digital library datastores.

Busuioc et al. (6,459,683 B2) discloses a communications network management system.

Cantos et al. (6,529,784 B1) discloses a method and apparatus for monitoring computer systems and alerting users of actual or potential system errors.

MacPhail (6,600,499 B1) discloses a method and system for displaying status of critical indicators on diverse display devices and indicating changes in status.

Yamunachari et al. (US RE37,987 E) discloses a method and apparatus for selectively unmanaging elements on a network.

Capers et al. (US2003/0065764 A1) discloses an integrated diagnostic center.

Rose et al. (6,563,504 B1) discloses a system and method for creating 3D animated content for multiple playback platforms from a single production process.

Fox et al. (6,535,227 B1) discloses a system and method for assessing the security posture of a network and having a graphical user interface.

Network Computing ("Putting Simple Back Into SNMP") discloses Castle Rock Computing's SNMPc network management software.

DeRouchey ("A Remote Visual Interface Tool for Simulation Control And Display") discloses Visual Interactive Simulation, which is an animation method used to create a dynamic display of a system model, and to allow the viewer to control and interact with the running simulation.

Corazza ("Network Management System Graphical Interface") discloses a graphical user interface that represents telecommunications network objects.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (703) 305-1382. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey, can be reached at (703) 305-9705. The fax phone number for this Group is (703) 308-5358.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Group receptionist whose telephone number is (703) 305-3900.


JACK B. HARVEY
SUPERVISORY PATENT EXAMINER